

ACTIVE PIXEL CELL USING NEGATIVE TO POSITIVE VOLTAGE SWING TRANSFER TRANSISTOR

Abstract

A active pixel sensor cell is disclosed that comprises a pinned photodiode. A transfer transistor is placed between the pinned photodiode and an output node, the transfer transistor being a depletion mode N-type MOSFET. A reset transistor is coupled between a high voltage rail V_{dd} and the output node. Finally, an output transistor has its gate coupled to the output node.